

Title (en)

Device for controlling the idle speed of an internal combustion engine

Title (de)

Vorrichtung zur Regelung der Leerlaufdrehzahl einer Brennkraftmaschine

Title (fr)

Dispositif pour contrôler la vitesse ralenti d'un moteur à combustion interne

Publication

EP 0624724 B1 19960904 (DE)

Application

EP 94105824 A 19940415

Priority

DE 4315436 A 19930508

Abstract (en)

[origin: EP0624724A1] In a known device for controlling the idle speed of an internal combustion engine in order to control a quantity of fuel which can be fed into at least two flow lines of the internal combustion engine, a leakage flow can occur which is to be prevented. It is proposed, according to the invention, to arrange the first valve closing element (42) and the second valve closing element (52) axially displaceable relative to one another and to couple them by way of a driver device (60), in such a way that, with the first valve closing element (42) in the closed position, the second valve closing element (52) is also closed and the second valve closing element (52) is adjustable in the valve opening direction only once a predetermined opening position of the first valve closing element (42) is attained. The closing characteristics of the device (10) can be adapted according to requirements by the choice of spring arrangement and design of the springs (28, 54) acting on the valve closing elements (42, 52). The device is especially suitable for controlling the idling speed of a mixture-compressing internal combustion engine with applied ignition by controlling a quantity of fuel which can be fed to the internal combustion engine by way of a fuel metering device and an inlet port. <IMAGE>

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